

**Zoological Catalogue of Australia. Vol. 27.3A. HEMIPTERA. Heteroptera (Coleorrhyncha to Cimicomorpha).**—Prepared by G. Cassis and G. F. Gross. Australian Biological Resources Study. CSIRO. xv + 506 pp. Price US\$79.95.

The preparation of systematic catalogs of insects, and particularly those dealing with the Heteroptera, appears to be in an especially active phase at the moment. The current entries fall into two groups, those dealing with groups and those dealing with faunas.

We might cast back to 1923 when a General Catalogue of the Hemiptera was conceived at a meeting of the American Association for the Advancement of Science in Cincinnati. Although volumes for most, if not all, families of Auchenorrhyncha, were completed, the Heteroptera fared less well. Under the original General Catalogue banner, only the Mesoveliidae (Horvath, 1929) and Pyrrhocoridae (including Largidae) (Hussey, 1929) were ever completed. Nonetheless, Carvalho (1957-1960) indicated that he considered his monumental work on the Miridae to be a part of the original grand scheme. Drake and Ruhoff (1965—Tingidae) and Slater (1964—Lygaeidae) represent the other two remaining significant earlier efforts. Of the major groups it is only the Coreidae and Pentatomidae which do not have modern catalogs, and whose taxonomy is still in need of synthesis (Schuh and Slater, 1995). We can anticipate seeing the Pentatomoidea in the near future, with the Tessaratomidae already in print (Rolston et al., 1993). It is not clear that anyone has mustered the courage to tackle the Coreidae as yet.

Current day monographers and curators are no doubt pleased to see a renaissance in cataloging efforts with notable entries for groups including world catalogs of the Reduviidae by Putshkov and Putshkov (1986-1989) and the late J. Maldonado (1990), a supplement to the Lygaeidae (Slater and O'Donnell, 1995), an updated volume for the Miridae by Schuh (1995), and the much smaller Catalog of Leptopodomorpha (Schuh et al., 1987).

On the faunistic front the work of Henry and Froeschner (1988) updated coverage for North America from the badly outdated 1917 volume by E. P. Van Duzee. Volume 1 of the Catalog of the Heteroptera of the Palearctic Region (Auchema and Rieger, eds., 1995), represents the first such attempt since that of Oshanin (1906-1909).

Last, but not least, is the current treatment of the Australian fauna as prepared by Gerasimos Cassis and Gordon F. Gross. This work is part of the larger Zoological Catalogue of Australia series, all volumes being published in the same format. This work (the first of two dealing with the Australian Heteroptera) establishes a point of reference for continuing work on what remains probably the most poorly known arthropod fauna in the world.

The classification around which the catalog is based is up-to-date, although not without a few wrinkles. Nonetheless, the work will serve well anyone who wishes to deal with Australia but who may not have at hand references for all groups on a world basis.

The work is organized such that each family receives a short, but extremely informative, introductory section dealing with the history of the study of the group, and something about its biology, both aspects including citations of major papers. These sections offer a nice complement to the necessarily sketchy family treatments to be found in the insects of Australia (CSIRO, 1991).

The catalog itself offers a welter of information, including synonymies, type data, type localities, type depositions, distributions, ecological information (sometimes extrapolated), and lists of references. Information on taxa as they occur outside Australia is given, including synonymies, references, and distributions for genera and species. This approach is in marked contrast to the North American catalog (Henry and Froschner, 1988) in which all such information was restricted to North America north of Mexico, even though nominal taxa occurring outside that area may have been involved in synonymies and distributions may have been broader.

If the Australian catalog series has a drawback, it is that the format demands the repetition of author, title, and page for all references in the catalog every time they appear, making the total length of the catalog greater than would probably have been the case if abbreviated citations and a terminal list of references had been included. Furthermore, the user often must wade through many references strung together in paragraph form, and is at the same time unable to appreciate at a glance the contributions of individual authors to our knowledge of the Australian fauna.

Major catalogs have always facilitated—and probably spurred—many of the more comprehensive taxonomic efforts. With the status is the Australian Heteroptera now clearly revealed, it remains to be seen to what degree this volume reflects actual diversity in the antipodean fauna. I eagerly await the appearance of Vol. 2, which deals with generally larger and more conspicuous, and—as a consequence—slightly better known organisms.—*Randall T. Schuh, Department of Entomology, American Museum of Natural History, New York, New York 10024 USA.*

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